APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677.274	10/02/2000	Rambabu Tummala	P1007	4266

7590	12/14/2004

D. SCOTT HEMINGWAY
STORM & HEMINGWAY, LLP PRESTON COMMONS WEST,
8117 PRESTON ROAD SUITE 460
DALLAS,, TX 75225

EXAMINER
CHANG, JUNGWON

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)	
Office Action Summary	09/677,274	TUMMALA ET AL.	
	Examiner	Art Unit	
	Jungwon Chang	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *amendment filed on 9/30/04*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-42* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

FINAL ACTION

1.   Claims 1-42 are presented for examination.

2.   The objection of claims 13, 16, 30, 32 and 35 are withdrawn in responsive to the amendment filed on 9/30/2004.

3.   Claim 1 is objected to because the following informalities:

Line 6, a Authentication, Authorization, Accounting should be an Authentication, Authorization, Accounting.

Appropriate correction is required.

4.   35 U.S.C. 112, second paragraph rejection of claims 1-41 are withdrawn in responsive to the amendment filed on 9/30/2004.

5.   The text of those sections of Title 35, U. S. Code not included in this office action can be found in a prior office action.

6.   Claims 1, 2, 4, 6, 20-23, 25 and 40-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Basilier et al. (US 6,728,536), hereinafter Basilier.

7.   As to claim 1, Basilier discloses the invention as claimed, including a method for

establishing a connection for a mobile node (i.e., mobile terminal; col. 3, lines 54-56) on

a communications system (100, fig. 1) having a home network (i.e., home IP network;

col. 3, lines 49-50) for the mobile node and at least one foreign network (i.e., visited

access network; col. 3, line 65 – col. 4, line 4) comprising the steps of:

receiving a registration request message at a foreign network AAA server (i.e.,

Authentication, Authorization, Accounting server; AAA-F, fig. 1; col. 1, lines 43-46) (i.e.,

registration of the mobile node; col. 5, lines 30-35; col. 4, lines 62-64);

transmitting a request to an AAA broker server (i.e., Authentication,

Authorization, Accounting broker server; AAA-B; 120, fig. 1; col. 1, lines 49-51) to obtain

service level agreement (i.e., roaming agreement; col. 4, lines 49-52 and 57-64; col. 5,

lines 26-44; col. 6, lines 15-20; col. 7, lines 13-14 and 38-39; col. 8, lines 38-40) to

establish a connection between the foreign and home networks (col. 1, lines 49-54; col.

2, lines 27-33; col. 3, lines 50-57; col. 5, lines 36-40); and,

receiving at the foreign network AAA server (i.e., AAA-F, fig. 1; col. 1, lines 43-

46) a response transmitted from the AAA broker server (col. 5, lines 42-44) containing

service level agreement information stored on the AAAA broker server (i.e., roaming

agreement; col. 4, lines 49-52 and 57-64; col. 5, lines 26-44; AAA broker server

administrating the roaming agreements; col. 6, lines 15-20; using internal tables that a

specific AAA broker server has to be used; col. 6, lines 21-30; col. 7, lines 13-14 and

38-39; col. 8, lines 38-40).

8.   As to claim 2, Basilier discloses establishing a connection with an AAA server

(i.e., AAA-H; 110, fig. 1; col. 3, lines 49-50) on the home network based upon the

information received from the AAA broker server (col. 2, lines 30-33).

9.   As to claim 4, Basilier discloses containing the IP address of the home network to

which the request should be directly forwarded (col. 5, lines 49-51).

10.   As to claim 6, Basilier discloses transmitting the request to the AAA broker server

for all messages to be addressed to unknown networks in order to identify the home

network (i.e., determining the mobile node's home network; col. 6, lines 5-20; col. 5,

lines 36-42).

11.   As to claim 20, Basilier discloses after receiving the response from AAA broker

that services the home network, the foreign network initiates a security association

pursuant to the returned information in the response message by transmitting a

message to the home network from the foreign network (i.e., initiating the encapsulated

authentication information; col. 2, lines 17-26 and 62-67; col. 4, lines 11-20; col. 7, lines

34-36).

12.   As to claim 21, Basilier discloses receiving a message from the home network at

the foreign network AAA server after the home network AAA server processes a request

from the foreign network server for a secure connection (i.e., authentication

communications link between home and foreign networks; col. 2, lines 17-26; col. 5, lines

45-47).

13.   As to claims 22 and 42, Basilier discloses the invention as claimed, including a

system for establishing a home network connection of a mobile node (102, fig. 1) on a

foreign network (i.e., mobile terminal roams in a visited network; 104, fig. 1; col. 3, lines

39-40) in a wireless communications network comprising:

a home network (109, fig. 1) having a home agent (i.e., HA, 126, fig. 1) coupled

to a home AAA server (i.e., home Authentication, Authorization, Accounting broker

server; AAA-H, 110, fig. 1; col. 3, lines 49-50; col. 4, lines 4-8);

a foreign network (104, fig. 1) having a foreign agent (i.e., 122, 124, 130, fig. 1;

col. 4, lines 4-8 and 65-67) coupled to a foreign AAA server (i.e., Authentication,

Authorization, Accounting server; AAA-F, fig. 1; col. 1, lines 43-46);

a mobile node (102, fig. 1) transmitting a request message to the foreign AAA

server (i.e., Authentication, Authorization, Accounting server; AAA-F, fig. 1; col. 1, lines

43-46) in response to establish a connection between the mobile node and the home

network (i.e., transmitting a registration request of the mobile node; col. 5, lines 30-35;

col. 4, lines 62-64); and

a AAA broker server (i.e., Authentication, Authorization, Accounting broker

server; AAA-B; 120, fig. 1; col. 1, lines 49-51) coupled to the foreign AAA server (i.e.,

Authentication, Authorization, Accounting server; AAA-F, fig. 1; col. 1, lines 43-46), the

foreign AAA server transmitting a request to the AAA broker server to determine the

location of the home network (i.e., determining the mobile node's home network; col. 6,

lines 5-20) and security association information for establishing the secure connection between the mobile node and the home network according to a security protocol (i.e., AAA protocol; DIAMETER; end-to-end security; col. 5, lines 45-59) specified in the AAA broker server (encrypted specific information transmitted to a broker AAA server; col. 2, lines 16-33; col. 4, lines 49-52 and 57-64; col. 5, lines 26-44; AAA broker server administrating the roaming agreements; col. 6, lines 15-20; using internal tables that a specific AAA broker server has to be used; col. 6, lines 21-30; col. 7, lines 13-14 and 38-39; col. 8, lines 38-40).

14.   As to claim 23, it is rejected for the same reasons set forth in claim 4 above.

15.   As to claim 25, it is rejected for the same reasons set forth in claim 6 above.

16.   As to claim 40, it is rejected for the same reasons set forth in claim 20 above.

17.   As to claim 41, it is rejected for the same reasons set forth in claim 21 above.

18.   Claims 3, 14, 19, 33, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basilier et al. (US 6,728,536), in view of "Official Notice".

19.   As to claim 3, Basilier discloses receiving a response from the AAA broker server with a rejection response (i.e., deny service; col. 5, lines 22-25). However, Basilier does

not specifically disclose the AAA broker server determines that the home network is not found serviced by the AAA broker server. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include rejection response because in the event of a failure of the home node cannot provide the communication connection.

20.   As to claim 14, Basilier discloses transmitting a request to an AAA broker server (i.e., AAA-B; 120, fig. 1; col. 1, lines 49-51) in response to the response received by the foreign network server (col. 5, lines 36-40), and Basilier discloses a plurality of AAA broker servers (i.e., a number of AAA broker functions; col. 1, lines 49-51; col. 3, lines 60-61). However, Basilier does not specifically use a term second AAA broker server. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include second AAA broker server would improve fault tolerance by providing a plurality of AAA broker servers.

21.   As to claim 19, Basilier discloses a plurality of AAA broker servers (i.e., a number of AAA broker functions; col. 1, lines 49-51; col. 3, lines 60-61). However, Basilier does not specifically disclose contacting a second AAA broker server after a rejection response is received from the AAA broker server. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include second AAA broker server would improve fault tolerance by providing a plurality of AAA broker servers.

22.   As to claim 38, it is rejected for the same reasons set forth in claim 3 above.

23.   As to claims 33 and 39, they are rejected for the same reasons set forth in claim

19 above.

24.   Claims 5, 7-13, 15-18, 24, 26-32 and 34-37 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Basilier et al. (US 6,728,536), in view of Sitaraman et al.

(US 6,466,977), hereinafter Sitaraman.

25.   As to claims 5 and 9, Basilier does not specifically disclose AAA broker server

has multiple instances of a first value to indicate that different host networks can be

contacted. However, Sitaraman discloses AAA broker server (i.e., AAA proxy server)

has multiple instances of a first value to indicate that different host networks can be

contacted (col. 6, lines 52-66). It would have been obvious to one of ordinary skill in the

art at the time the invention was made to combine the teachings of Basilier and

Sitaraman because Sitaraman's indication of contacting with different host networks

would improve reliability of communications by allowing the mobile device to selectively

connect to the desired communications network.

26.   As to claims 7 and 8, Basilier discloses the foreign network having roaming

agreements with the home network (col. 5, lines 26-28; col. 6, lines 5-20). However,

Basilier does not specifically disclose receiving the response from the AAA broker

server with a session time-out value as a discretionary indication to the foreign network server on how long the home network entry should be maintained as valid on the foreign network. Sitaraman discloses receiving the response from the AAA server with a session time-out value as a discretionary indication to the foreign network server on how long the home network entry should be maintained as valid on the foreign network (i.e., Service Level Agreement (SLA) parameters such as time of day, day of week; col. 3, lines 22-24; col. 6, lines 52-66). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Basilier and Sitaraman because Sitaraman's response with a time value would improve the quality of service by providing the information of network availability based on the service agreements.

27.   As to claim 10, Basilier discloses AAA broker server with a certificate of the foreign network server (i.e., public encrypted key; col. 1, lines 49-54). However, Basilier does not specifically disclose host network server. Sitaraman discloses a host network server (i.e., ISPA or ISPB; col. 6, lines 52-66). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Basilier and Sitaraman because Sitaraman's host network server would increase the capability of Basilier's system by allowing the mobile node to alternatively connect to the authenticated host network server.

28.   As to claim 11, it is rejected for the same reasons set forth in claim 10 above.

In addition, Basilier discloses a mobile user identity (i.e., user-name, user-password, user-IP address; col. 3, lines 7-10 and 42-46; col. 6, lines 10-18). However, Basilier does not specifically use a term "AVP (i.e., Attribute Value Pair consisting of a name of an attribute and a value such as, user-name, user-password, user-IP address). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include AVP because doing so would improve the security of Basilier's system by allowing the system to verify the user using the information stored in the attributes.

29.   As to claim 12, Basilier discloses receiving the response from the AAA broker server with a certificate of the foreign network server (i.e., public encrypted key; col. 1, lines 49-54) where the foreign network server forwards the certificate in a communication to the home AAA server (i.e., transmitting the encrypted information from the foreign network to the home network; col. 2, lines 23-26; col. 4, lines 11-20; col. 7, lines 34-36).

30.   As to claims 15-17, Basilier discloses receiving the response from the AAA broker server (col. 5, lines 42-44) after the AAA broker server validates the request from the foreign network against information retained in the AAA broker server on allowed request client (i.e., service/roaming agreements or routing information; col. 5, lines 37-39; col. 6, lines 5-20) or by processing a destination or user name attribute (i.e., mobile user identity, i.e., user-name, user-password, user-IP address, col. 3, lines 7-10 and 42-46; col. 6, lines 10-18) in an attempt to find a match on the home network (i.e.,

determining/finding the mobile node's home network; col. 6, lines 5-20; col. 5, lines 36-42).

31.   As to claims 13, 30 and 32, they are rejected for the same reasons set forth in claim 11 above.

32.   As to claim 18, it is rejected for the same reasons set forth in claim 16 above

33.   As to claim 24, it is rejected for the same reasons set forth in claim 5 above.

34.   As to claims 26 and 27, they are rejected for the same reasons set forth in claims 7 and 8 above.

35.   As to claim 28, it is rejected for the same reasons set forth in claim 9 above.

36.   As to claim 29, it is rejected for the same reasons set forth in claim 10 above.

37.   As to claim 31, it is rejected for the same reasons set forth in claim 12 above.

38.   As to claims 34-37, they are rejected for the same reasons set forth in claims 15-17 above.

39.   Applicant's arguments filed 9/30/2004 have been fully considered but they are

not persuasive.

40.   In the remarks, applicant argued in substance that

(1)   The '526 patent does not use broker servers for obtaining SLA information to

establish security associations for encrypted information packet communication. The

'526 Patent does not suggest, teach, or disclose using the AAA broker server to

provide, store, or obtain service level agreements for establishing security associations.

39.   Examiner respectfully traverses applicant's remark.

As to point (1), '536 patent clearly teaches using the AAA broker server to provide,

store, or obtain service level agreements for establishing security associations (i.e.,

encrypted specific information transmitted to a broker AAA server; col. 2, lines 16-33;

roaming agreement; col. 4, lines 49-52 and 57-64; col. 5, lines 26-44; AAA protocol;

DIAMETER; end-to-end security; col. 5, lines 45-59; AAA broker server administrating

the roaming agreements; col. 6, lines 15-20; using internal tables that a specific AAA

broker server has to be used; col. 6, lines 21-30; col. 7, lines 13-14 and 38-39; col. 8,

lines 38-40). Furthermore, it is inherent that AAA broker server includes AAA service.

These AAA services consist of authentication, authorization, and accounting services.

40.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

        policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

41.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jungwon Chang whose telephone number is (703) 305-

9669. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John A Follansbee can be reached on (703) 305-8498. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

        Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Jungwon Chang
December 10, 2004

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100